

Reference Table: This table provides information for reviewers (IRDs to RbRs)

IRD_id	req_key	source_interface	desti_interface	text	ccr	paragraph_id	req_key	seg_allocat	req_type	s_ve_method	s_ver_status	a_ver_method	a_ver_status	req_category	text	ccr
NSI-0010	1048	N/A	N/A	NSI, responsible for EOSDIS "Mission Success" network services, shall provide network connectivity to the following ESC facilities: a. ECS at the GSFC DAAC, Goddard Space Flight Center (GSFC), Greenbelt, Maryland b. ECS Operations Center (EOC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland c. System Monitoring and Coordination facility (SMC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland d. ECS at the EDC DAAC, Earth Resources Observation System (EROS) Data Center (EDC), Sioux Falls, South Dakota e. ECS at the JPL DAAC, Jet Propulsion Laboratory (JPL), Pasadena, California f. ECS at the LaRC DAAC, Langley Research Center		NSI-0010#B	6237	CSMS	procedural		un-verified		un-verified		NSI, responsible for EOSDIS "Mission Success" network services, shall provide network connectivity to the following ECS facilities: a. ECS at the GSFC DAAC, Goddard Space Flight Center (GSFC), Greenbelt, Maryland b. ECS Operations Center (EOC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland c. System Monitoring and Coordination facility (SMC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland d. ECS at the EDC DAAC, Earth Resources Observation System (EROS) Data Center (EDC), Sioux Falls, South Dakota e. ECS at the JPL DAAC, Jet Propulsion Laboratory (JPL), Pasadena, California f. ECS at the LaRC DAAC, Langley Research Center (LaRC), Hampton,	

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				(LaRC), Hampton, Virginia g. ECS at the NSIDC DAAC, University of Colorado, National Snow and Ice Data Center (NSIDC), Boulder, Colorado h. ECS at the ASF DAAC, University of Alaska, Alaska Synthetic Aperture Radar (SAR) Facility (ASF), Fairbanks, Alaska i. ECS at the MSFC DAAC, Marshall Space Flight Center (MSFC), Huntsville, Alabama											Virginia g. ECS at the NSIDC DAAC, University of Colorado, National Snow and Ice Data Center (NSIDC), Boulder, Colorado h. ECS at the ASF DAAC, University of Alaska, Alaska Synthetic Aperture Radar (SAR), Fairbanks, Alaska	
						NSI-0010#A	8204	CSMS	procedural	inspection	un-verified	demo	un-verified	mission essential	NSI, responsible for EOSDIS "Mission Success" network services, shall provide network connectivity to the following ECS facilities: a. ECS at the GSFC DAAC, Goddard Space Flight Center (GSFC), Greenbelt, Maryland c. System Monitoring and Coordination facility (SMC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland f. ECS at the	96-1214

IRD_id	req_key	source_interface	desti_interface	text	ccr	paragraph_id	req_key	seg_allocat	req_type	s_ve_method	s_ver_status	a_ver_method	a_ver_status	req_category	text	ccr
															LaRC DAAC, Langley Research Center (LaRC), Hampton, Virginia	
NSI-0020	1049	N/A	N/A	NSI shall provide support for TCP/IP communication proteols <u>protocols</u> and services to ESN.		NSI-0020#B	6238	CSMS	procedural		un-verified		un-verified		NSI shall provide support for TCP/IP communication protocols and services to ESN.	
						NSI-0020#A	6633	N/A_procedural	procedural	not verified by ECS	N/A_procedural	not verified by ECS	N/A_procedural	N/A_procedural	NSI shall provide support for TCP/IP communication protocols and services to ESN.	96-0909A
NSI-0040	1051	NSI	ECS	NSI shall make available to ECS informatin <u>information</u> regarding fault status and estimated time to repair or resolve NSI faults that may affect the quality of NSI services between ECS and its users.		NSI-0040#B	6240	CSMS	interface		un-verified		un-verified		NSI shall make available to ECS information regarding fault status and estimated time to repair or resolve NSI faults that may affect the quality of NSI services between ECS and its users.	
						NSI-0040#A	6638	CSMS	interface	demo	un-verified	demo	un-verified	mission essential	NSI shall make available to ECS information regarding fault status and estimated time to repair or resolve NSI faults that may affect the quality of NSI services between ECS and its users.	96-0909A
NSI-0080	1055	ECS	NSI	ECS shall have the capability of sending and NSI shall have the		NSI-0080#B	6244	CSMS	interface		un-verified		un-verified		ECS shall have the capability of sending and NSI shall have the	

IRD_id	req_key	source_interface	desti_interface	text	ccr	paragraph_id	req_key	seg_allocat	req_type	s_ve_method	s_ver_status	a_ver_method	a_ver_status	req_category	text	ccr
				capability of receiving notification of security breaches at ECS facilities that could affect NSI and other EOSDIS sites.											capability of receiving notification of security breaches at ECS <u>ECS</u> facilities that could affect NSI and other EOSDIS sites.	
						NSI-0080#A	6646	CSMS	interface security	demo	un-verified	demo	un-verified	mission essential	ECS shall have the capability of sending and NSI shall have the capability of receiving notification of security breaches at ECS facilities that could affect NSI and other EOSDIS sites.	960909A

Reference Table (continue): This table provides information for reviewers (RbRs to L4s)

RbR_id	RbR_key	text	ccr	L4_id	req_key	req_el	req_type	verification_method	verification_status	text	ccr
NSI-0010#B	6237	NSI, responsible for EOSDIS "Mission Success" network services, shall provide network connectivity to the following ECS facilities: a. ECS at the GSFC DAAC, Goddard Space Flight Center (GSFC), Greenbelt, Maryland b. ECS Operations Center (EOC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland c. System Monitoring and Coordination facility (SMC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland d. ECS at the EDC DAAC, Earth Resources Observation System (EROS) Data Center (EDC), Sioux Falls, South Dakota e. ECS at the JPL DAAC, Jet Propulsion Laboratory (JPL), Pasadena, California f. ECS at the LaRC DAAC, Langley Research Center (LaRC), Hampton, Virginia g. ECS at the NSIDC DAAC, University of Colorado, National Snow and Ice Data Center (NSIDC), Boulder, Colorado h. ECS at the ASF DAAC, University of Alaska, Alaska Synthetic Aperture Radar (SAR), Fairbanks, Alaska									
NSI-0010#A	8204	NSI, responsible for EOSDIS "Mission Success" network services, shall provide network connectivity to the following ECS facilities: a. ECS at the GSFC DAAC, Goddard Space Flight Center (GSFC), Greenbelt, Maryland c. System Monitoring and Coordination facility (SMC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland f. ECS at the LaRC DAAC, Langley Research Center (LaRC), Hampton, Virginia	96 - 12 14								
NSI-0020#B	6238	NSI shall provide support for TCP/IP communication protocols and services to ESN.									
NSI-0020#A	6633	NSI shall provide support for TCP/IP communication protocols and services to ESN.	96 - 09 09 A								
NSI-0040#B	6240	NSI shall make available to ECS		C-MSS-	7814	B	function	test		The MSS Fault Management Application Service at the SMC shall be	

		information regarding fault status and estimated time to repair or resolve NSI faults that may affect the quality of NSI services between ECS and its users.		60371		al			capable of sending gathered isolation, location, identification and characterization of reported faults data to the level of subsystem and equipment to the following: a. Site Fault Management Applications b. EBnet c. ASTER b. NOAA(SAA) e. Landsat (MMO) f. NSI g. NOLAN.	
				C-MSS-60160	10730	A operational	test	unverified	The MSS EMC Fault Management Application Service shall have the capability to receive notifications of detected faults and degradation of performance from: a. Site fault management applications b. Other external systems as defined in Section 5.1.	9 6 - 0 9 7 0 A
NSI-0040#A	6638	NSI shall make available to ECS information regarding fault status and estimated time to repair or resolve NSI faults that may affect the quality of NSI services between ECS and its users.	96 - 09 09 A	C-MSS-60160	10730	A operational	test	unverified	The MSS EMC Fault Management Application Service shall have the capability to receive notifications of detected faults and degradation of performance from: a. Site fault management applications b. Other external systems as defined in Section 5.1.	9 6 - 0 9 7 0 A
NSI-0080#B	6244	ECS shall have the capability of sending and NSI shall have the capability of receiving notification of security breaches at ESC facilities that could affect NSI and other EOSDIS sites.		C-MSS-70478	7838	B interface	test		The MSS Security Management Application Service shall have the capability to send to NSI, notification of security breaches at ECS facilities that could affect NSI and other EOSDIS sites.	
				C-MSS-10080	11587	I R 1 interface	test	unverified	The MSS shall interface with the NASA Science Internet (NSI) to exchange data identified in Table 4.1-1 as specified in ECS/NSI IRD, 05-41-17.	9 6 - 1 0 9 8
NSI-0080#A	6646	ECS shall have the capability of sending and NSI shall have the capability of receiving notification of security breaches at ECS facilities that could affect NSI and other EOSDIS sites.	96 - 09 09 A	C-MSS-10080	11587	I R 1 interface	test	unverified	The MSS shall interface with the NASA Science Internet (NSI) to exchange data identified in Table 4.1-1 as specified in ECS/NSI IRD, 05-41-17.	9 6 - 1 0 9 8

Change Table. 1: This table identifies modifications to existing IRD NSI requirements in the 110896 baseline version of the RTM database

IRD_id	req_key	source_interface	destination_interface	text	ccr
NSI-0010	1048	N/A	N/A	NSI, responsible for EOSDIS "Mission Success" network services, shall provide network connectivity to the following ESC facilities: a. ECS at the GSFC DAAC, Goddard Space Flight Center (GSFC), Greenbelt, Maryland b. ECS <u>EOS</u> Operations Center (EOC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland c. System Monitoring and Coordination facility (SMC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland d. ECS at the EDC DAAC, Earth Resources Observation System (EROS) Data Center (EDC), Sioux Falls, South Dakota e. ECS at the JPL DAAC, Jet Propulsion Laboratory (JPL), Pasadena, California f. ECS at the LaRC DAAC, Langley Research Center (LaRC), Hampton, Virginia g. ECS at the NSIDC DAAC, University of Colorado, National Snow and Ice Data Center (NSIDC), Boulder, Colorado h. ECS at the ASF DAAC, University of Alaska, Alaska Synthetic Aperture Radar (SAR) Facility (ASF), Fairbanks, Alaska i. ECS at the MSFC DAAC, Marshall Space Flight Center (MSFC), Huntsville, Alabama	
NSI-0020	1049	N/A	N/A	NSI shall provide support for TCP/IP communication proteols <u>protocols</u> and services to ESN <u>ECS</u> .	
NSI-0040	1051	NSI	ECS	NSI shall make available to ECS informatin <u>information</u> regarding fault status and estimated time to repair or resolve NSI faults that may affect the quality of NSI services between ECS and its users.	

Change Table. 2: This table identifies modifications to existing RbR NSI requirements in the 110896 baseline version of the RTM database

RbR_id	req_key	seg_allocation	req_type	s_ve_method	s_ver_status	a_ver_method	a_ver_status	req_category	text	ccr
NSI-0010#B	6237	CSMS	procedural	<u>demo</u>	un-verified	<u>demo</u>	un-verified	<u>N/A_procedural</u>	NSI, responsible for EOSDIS "Mission Success" network services, shall provide network connectivity to the following ECS facilities: a. ECS at the GSFC DAAC, Goddard Space Flight Center (GSFC), Greenbelt, Maryland b. ECS EOS Operations Center (EOC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland c. System Monitoring and Coordination facility (SMC), Goddard Space Flight Center (GSFC), Greenbelt, Maryland d. ECS at the EDC DAAC, Earth Resources Observation System (EROS) Data Center (EDC), Sioux Falls, South Dakota e. ECS at the JPL DAAC, Jet Propulsion Laboratory (JPL), Pasadena, California f. ECS at the LaRC DAAC, Langley Research Center (LaRC), Hampton, Virginia g. ECS at the NSIDC DAAC, University of Colorado, National Snow and Ice Data Center (NSIDC), Boulder, Colorado h. ECS at the ASF DAAC, University of Alaska, Alaska Synthetic Aperture Radar (SAR), Fairbanks, Alaska	
NSI-0020#B	6238	CSMS	procedural	<u>not verified by ECS</u>	un-verified	<u>not verified by ECS</u>	un-verified	<u>N/A_procedural</u>	NSI shall provide support for TCP/IP communication protocols and services to <u>ESN-ECS</u> .	
NSI-0020#A	6633	N/A_procedural	procedural	not verified	N/A_procedural	not verified	N/A_procedural	N/A_procedural	NSI shall provide support for TCP/IP communication protocols and services to	96-0909A

RbR_id	req_key	seg_allocation	req_type	s_ve_method	s_ver_status	a_ver_method	a_ver_status	req_category	text	ccr
		al		by ECS		by ECS			ESN <u>ECS</u> .	
NSI-0080#B	6244	CSMS	interface	<u>demo</u>	un-verified	<u>demo</u>	un-verified	<u>mission essential</u>	ECS shall have the capability of sending and NSI shall have the capability of receiving notification of security breaches at ESC <u>ECS</u> facilities that could affect NSI and other EOSDIS sites.	

Table. 3: New NSI IRD requirement

IRD_id	req_key	source_interface	destination_interface	text
<u>NSI-0032</u>	<u>New</u>	<u>ECS</u>	<u>NSI</u>	<u>ECS shall have the capability of sending and NSI shall have the capability of receiving notification of faults in ECS networks that may affect the quality of NSI services between ECS and its users.</u>

Table. 3: RbR requirements

RbR_id	req_key	seg_allocation	req_type	s_ve_method	s_ver_status	a_ver_method	a_ver_status	req_category	text
<u>NSI-0032#A</u>	<u>New</u>	<u>CSMS</u>	<u>interface</u>	<u>demo</u>	<u>un-verified</u>	<u>demo</u>	<u>un-verified</u>	<u>mission essential</u>	<u>ECS shall have the capability of sending and NSI shall have the capability of receiving notification of faults in ECS networks that may affect the quality of NSI services between ECS and its users.</u>
<u>NSI-0032#B</u>	<u>New</u>	<u>CSMS</u>	<u>interface</u>	<u>demo</u>	<u>un-verified</u>	<u>demo</u>	<u>un-verified</u>	<u>mission essential</u>	<u>ECS shall have the capability of sending and NSI shall have the capability of receiving notification of faults in ECS networks that may affect the quality of NSI services between ECS and its users.</u>

Table. 4: Linkage to L4s

RbR_Id	L4s
<u>NSI-0032#A</u>	C-MSS-60210
<u>NSI-0032#A</u>	C-MSS-60220
<u>NSI-0032#B</u>	C-MSS-60210
<u>NSI-0032#B</u>	C-MSS-60220

Table 5: RBR Id -to- Ext_Interface_Id

RbR_Id	Ext_Interface_Id
<u>NSI-0032#A</u>	<u>NSI#Fault Notification From ECS</u>
<u>NSI-0032#B</u>	<u>NSI#Fault Notification From ECS</u>